This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A nucleic acid which ~~binds to~~ discriminates a bioactive n-octanoyl ghrelin from a non-bioactive des-octanoyl ghrelin, wherein said nucleic acid comprises SEQ ID NO:1.

2.-3. (Cancel)

4. (Currently Amended) The nucleic acid according to claim 1, ~~2 or claim 3, whereby~~ wherein the ~~specific~~ binding is expressed as ~~the~~ a Kd value, ~~whereby~~ wherein the Kd of the nucleic acid is from 10 pM to 1 µM~~, more preferable from 100 pM to 500 nM, and most preferable from 1 nM to 100 nM~~.

5. (Cancel)

6. (Currently Amended) The nucleic acid according to claim ~~5~~ 1, wherein the n-octanoyl moiety of the n-octanoyl ghrelin is attached through an ester bond to Ser at position 3 of ghrelin.

7. (Currently Amended) The nucleic acid according to ~~any of~~ claims 1 ~~to 6~~, ~~whereby~~ wherein the nucleic acid is an L-nucleic acid~~, preferably a spiegelmer~~.

8. (Currently Amended) The nucleic acid according to ~~any of~~ claims 1 ~~to 7~~, ~~whereby~~ wherein the nucleic acid is selected from the group ~~comprising~~ consisting of deoxyribonucleic acid, ribonucleic acid and mixtures thereof.

9. (Currently Amended) The nucleic acid according to ~~any of~~ claims 1, wherein ~~to 8, whereby~~ the nucleic acid has a secondary structure shown in Fig. 1B.

10. (Currently Amended) The nucleic acid according to ~~any of~~ claims ~~1 to~~ 9, ~~whereby~~ wherein the nucleic acid is variable in the internal loop structure of the secondary structure shown in Fig. 1B.

11. (Currently Amended) The nucleic acid according to ~~any of~~ claims 1 ~~to 10~~, ~~whereby~~ wherein the nucleic acid ~~comprises, preferably~~ consists of ~~, a sequence according to SEQ.ID.No~~ ~~1~~ SEQ ID NO:1.

12. (Currently Amended) The nucleic acid according to ~~any of~~ claims ~~1 to 11~~, ~~whereby~~ wherein the nucleic acid comprises~~, preferably consists of,~~ the sequence according to any one of SEQ ID NOs:2-15 ~~SEQ. ID. No. 2 to SEQ. ID. No. 15~~.

13.-30. (Cancel)

31. (Withdrawn, Currently Amended) A method for the detection of bioactive n-octanoyl ghrelin, comprising the following steps:

(a) providing a sample which is to be tested for the presence of bioactive n-octanoyl ghrelin,

(b) providing ~~a~~ the nucleic acid according to ~~any of the~~ claims 1 ~~to 12~~, and

(c) reacting the sample with the nucleic acid in a vessel,

~~whereby~~ wherein step (a) can be performed ~~performed~~ prior to step (b), or step (b) can be preformed prior to step (a).

32. (Withdrawn) The method according to claim 31, wherein a further step (d) is provided:

(d) detecting the reaction of the sample with the nucleic acid.

33. (Withdrawn) The method according to claim 32, wherein the nucleic acid of step (b) is immobilized to a surface.

34. (Withdrawn) The method according to claim 33, wherein the nucleic acid is immobilized to a surface via a covalent chemical bond between the surface and the nucleic acid.

35. (Withdrawn) The method according to claim 34, wherein the nucleic acid is immobilized to a surface by an interaction partner of the nucleic acid.

36. (Withdrawn, Currently Amended) The method according to claim 35, wherein the interaction partner is selected from the group ~~comprising~~ consisting of nucleic acids, polypeptides, proteins and antibodies.

37. (Withdrawn, Currently Amended) The method according to claim 35 ~~36~~, wherein the interaction partner is an antibody, ~~preferably a monoclonal antibody, whereby~~ wherein the antibody ~~is binding~~ binds to the nucleic acid according to ~~any of~~ claims 1 ~~to 12~~.

38. (Withdrawn, Currently Amended) The method according to claim 36, wherein the interaction partner is a nucleic acid~~, preferably a functional nucleic acid~~.

39. (Withdrawn, Currently Amended) The method according to claim 38, wherein the ~~functional~~ nucleic acid is selected from the group ~~comprising~~ consisting of aptamers, spiegelmers, and nucleic acids which are at least partially complementary to the nucleic acid.

40. (Withdrawn) The method according to claim 33, wherein the nucleic acid comprises a first member of a pair of interaction partners and the surface comprises a second member of the pair of interaction partners.

41. (Withdrawn, Currently Amended) The method according to claim 40, wherein the pair of interaction partners are selected from the group of interaction partners ~~comprising~~ consisting of biotin and avidin, biotin and streptavidin, and biotin and neutravidin.

42. (Withdrawn) The method according to claim 41, wherein the first member of the pair of interaction partners is biotin.

43. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 33 ~~to 42~~, wherein an immobilized complex of bioactive ghrelin and the nucleic acid is formed.

44. (Withdrawn) The method according to claim 43, wherein the complex is detected.

45. (Withdrawn) The method according to claim 44, wherein the bioactive ghrelin is detected.

46. (Withdrawn) The method according to claim 45, wherein the bioactive ghrelin is detected by a detection means which is specific for bioactive ghrelin.

47. (Withdrawn) The method according to claim 46, wherein the bioactive ghrelin is detected by a detection means which detects both bioactive ghrelin and non-bioactive ghrelin.

48. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 44 ~~to 47~~, wherein the detection means is selected from the group ~~comprising~~ consisting of nucleic acids, polypeptides, proteins and antibodies.

49. (Withdrawn, Currently Amended) The method according to any of claims 44 to 48, wherein after the complex formation, the sample is removed from the reaction vessel.

50. (Withdrawn) The method according to claim 32, wherein an interaction partner of bioactive and/or non-bioactive ghrelin is immobilized on a surface.

51. (Withdrawn, Currently Amended) The method according to claim 50, wherein the interaction partner is selected from the group ~~comprising~~ consisting of nucleic acids, polypeptides, proteins and antibodies.

52. (Withdrawn, Currently Amended) The method according to claim 50 ~~51~~, wherein the interaction partner is capable of binding bioactive ghrelin and/or non-bioactive ghrelin.

53. (Withdrawn, Currently Amended) The method according to claim 51 or 52, wherein the interaction partner is an antibody~~, preferably a monoclonal antibody~~.

54. (Withdrawn) The method according to claim 51 or 52, wherein the interaction partner is a functional nucleic acid.

55. (Withdrawn, Currently Amended) The method according to claim 54, wherein the functional nucleic acid is selected from the group ~~comprising~~ consisting of aptamers and spiegelmers.

56. (Withdrawn, Currently Amended) The method according to ~~any of~~ claim~~s~~ 50 ~~to 55~~, wherein the interaction partner forms a complex with the bioactive and/or the non-bioactive ghrelin.

57. (Withdrawn, Currently Amended) The method according to ~~any of~~ claim~~s~~ 50 ~~to 56~~, wherein the bioactive ghrelin is detected by a detection means.

58. (Withdrawn, Currently Amended) The method according to claim 57, wherein the detection means is ~~a~~ the nucleic acid according to ~~any of~~ claims 1 ~~to 12~~.

59. (Withdrawn) The method according to claim 58, wherein the nucleic acid is detected using a second detection means.

60. (Withdrawn, Currently Amended) The method according to claim 59, wherein the second detection means is selected from the group ~~comprising~~ consisting of nucleic acids, polypeptides, proteins and antibodies.

61. (Withdrawn, Currently Amended) The method according to claim 60, wherein the second detection means is an antibody~~, whereby preferably the antibody is specific for the nucleic acid~~.

62. (Withdrawn, Currently Amended) The method according to claim 60, ~~whererby~~ wherein the second detection means is a nucleic acid~~, preferably a molecular beacon~~.

63. (Withdrawn) The method according to claim 60, wherein the nucleic acid comprises a detection label.

64. (Withdrawn, Currently Amended) The method according to claim 63, wherein the detection label is selected from the group ~~comprising~~ consisting of biotin, a bromo-desoxyuridine label, a digoxigenin label, a fluorescence label, a UV-label, a radio-label, and a chelator molecule.

65. (Withdrawn) The method according to claim 63, wherein the second detection means interacts with the detection label.

66. (Withdrawn, Currently Amended) The method according to claim 65, wherein

the detection label is biotin and the second detection means is an antibody directed against biotin, ~~or wherein~~

the detection label is biotin and the second detection means is an avidin or an avidin carrrying molecule, ~~or wherein~~

the detection label is biotin and the second detection means is a streptavidin or a stretavidin carrying molecule, ~~or wherein~~

the detection label is biotin and the second detection means is a neutravidin or a neutravidin carrying molecule, ~~or~~

~~wherein~~ the detection label is a bromo-desoxyuridine and the second detection means is an antibody directed against bromo-desoxyuridine, ~~or wherein~~

the detection label is a digoxigenin and the second detection means is an antibody directed against digoxigenin, or

~~wherein~~ the detection label is a chelator and the second detection means is a radionuclide ~~radio-nuklide~~.

67. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 50 ~~to 66~~, wherein the second detection means is detected using a third detection means~~, preferably the third detection means is an enzyme, more preferably showing an enzymatic reaction upon detection of the second detection means, or the third detection means is a means for detecting radiation, more preferably radiation emitted by a radio-nuclide~~.

68. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 56 ~~to 67~~, wherein after complex formation the sample is removed from the reaction~~, more preferably from the reaction vessel where step c and/or step (d) are performed~~.

69. (Withdrawn, Currently Amended) The method according to claim 32, wherein the nucleic acid according to ~~any of~~ claims ~~1 to 12~~ comprises a fluorescence moiety and ~~whereby~~

wherein the fluorescence of the fluorescence moiety is different upon complex formation between the nucleic acid and bioactive ghrelin and free bioactive ghrelin.

70. (Withdrawn, Currently Amended) The method according to claim 32 ~~and~~ or 69, wherein the nucleic acid is a derivative of the nucleic acid according to ~~any of~~ claims 1 ~~to 12, whereby,~~ wherein the derivative of the nucleic acid comprises at least one fluorescent derivative of adenosine replacing adenosine.

71. (Withdrawn) The method according to claim 70, wherein the fluorescent derivative of adenosine is ethenoadenosine.

72. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 69 ~~to 71~~, wherein the complex consisting of the derivative of the nucleic acid according to ~~any of~~ claims 1 ~~to 12~~ and the bioactive ghrelin is detected using fluorescence.

73.-74. (Cancel)

75. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 32 ~~31 to 74~~, wherein a signal is created in step (c) or step (d) ~~and preferably the signal is correlated with the concentration of bioreactive ghrelin in the sample~~.

76. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 31 ~~to 75~~, wherein the sample is selected from the group ~~comprising~~ consisting of blood, plasma, serum, liquor, and tissues.

77. (Withdrawn, Currently Amended) The method according to ~~any of~~ claims 31 ~~to 76~~, wherein the method is a diagnostic method or prognostic method.

78. (Withdrawn, Currently Amended) The method according to claim 77, wherein ~~the method is for diagnosing, staging, and/or prognosing~~ a disease and/or a disorder relating to said method~~, whereby preferably said disease and/or disorder~~ is selected from the group consisting of ~~comprising~~ obesity, regulation of energy balance, appetite, body weight, eating disorders, diabetes, glucose metabolism, tumor, blood pressure, and cardiovascular disease.

79. (New) The nucleic acid according to claim 4, wherein the Kd of the nucleic acid is from 100 pM to 500 nM.

80. (New) The nucleic acid according to claim 79, wherein the Kd of the nucleic acid is from 1 nM to 100 nM.

81. (New) The nucleic acid according to any of claim 7, wherein the L-nucleic acid is a spiegelmer.

82. (New, Withdrawn) The method according to claim 70, wherein the complex consisting of the derivative of the nucleic acid according to claim 1 and the bioactive ghrelin is detected using fluorescence.

83. (New, Withdrawn) The method according to claim 71, wherein the complex consisting of the derivative of the nucleic acid according to claim 1 and the bioactive ghrelin is detected using fluorescence.

84. (New, Withdrawn) The method according to claim 37, wherein said antibody is a monoclonal antibody.

85. (New, Withdrawn) The method according to claim 53, wherein said antibody is a monoclonal antibody.

86. (New, Withdrawn) The method according to claim 61, wherein said antibody is specific for said nucleic acid.

87. (New, Withdrawn) The method according to claim 62, wherein said second detection means is a molecular beacon.

88. (New, Withdrawn) The method according to claim 67, wherein the third detection means comprises an enzyme.

89. (New, Withdrawn) The method according to claim 67, wherein the third detection means comprises detecting radiation.

90. (New, Withdrawn) The method according to claim 68, wherein the sample is removed in step (c) or in step (d).